Homework 3

GSND 5345Q, Fundamentals of Data Science

Due Friday, February 6th, 2026

GitHub (100 points)

In this section, you will reinforce the concepts and skills covered in the introductory lecture on Git and GitHub. You will answer a set of conceptual questions to demonstrate your understanding of Git's core functionality and complete hands-on tasks to practice using Git commands and interacting with GitHub.

1. What is the purpose of Git, and how does it differ from GitHub?
2. Explain the difference between a commit and a push in Git.
3. What does the command git clone do, and how is it different from git pull?
4. Initialize a new Git repository in a local folder and create a file named README.md. Add some text to it, commit the changes, and push it to a new GitHub repository. Submit the link to your repository.
5. Fork the https://github.com/wevanjohnson/my.package directory and clone it to your local machine. Then add your name as an author in the DESCRIPTION file local repository and add a multiplication function to the R package (R folder). Then push the changes to your GitHub fork, and send me a pull request with your changes.
6. Clone the https://github.com/wevanjohnson/2026_Spring_FDS repository on your computer. Find something that could be improved (typo? explain somthing better), add files/changes to it, and upload it to GitHub. Send another well-annotated pull request to Dr. Johnson.